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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/668,219   | 09/22/2000  | Yunzhou Li           | 2204/A42            | 9843             |
| 34845  | 7590        | 12/14/2005           | EXAMINER            |                  |
| STEUBING MCGUINNESS & MANARAS LLP<br>125 NAGOG PARK<br>ACTON, MA 01720 |             |                      | LY, ANH VU H        |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2667                |                  |

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                    |  |
|------------------------------|--------------------------------------|------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/668,219 | <b>Applicant(s)</b><br>LI, YUNZHOU |  |
|                              | <b>Examiner</b><br>Anh-Vu H. Ly      | <b>Art Unit</b><br>2667            |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11-13, 18-30, 35-37, 42-45, 50, 51, 56 and 57 is/are rejected.
- 7) ☒ Claim(s) 7-10, 14-17, 31-34, 38-41, 46-49 and 52-55 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. This communication is in response to applicant's amendment filed October 11, 2005.  
Claims 1-57 are pending.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6, 11-13, 18-30, 35-37, 42-45, 50-51, and 56-57 are rejected under 35 U.S.C. 102(e) as being anticipated by Jardetzky et al (US Patent No. 6,392,989 B1).

With respect to claims 1, 6, 19, 24, 30, and 37, Jardetzky discloses a method for bridging network traffic in a networking device having a plurality of communication interfaces (Fig. 1B). Jardetzky discloses creating a bridged routing entry in a bridged routing table that is separate from a main routing table (Fig. 5B) and wherein, the main routing table for routing network traffic (Fig. 5A). Jardetzky discloses the bridged routing table for bridging network traffic over both a first communication interface and a second communication interface before requiring a bridge between the predetermined pair of communication interfaces (when failure occurs in the switch 100-2, the entry of the recovery mappings points to the output port 4:a of link 200 (second

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communication interface) instead of 1:a of link 200 (first communication interface), as disclosed in Fig. 5B). Jardetzky discloses subsequently determining that a bridge is needed between the first communication interface and the second communication interface and establishing the bridge between the first communication interface and the second communication interface using the bridged routing entry (Figure 4 illustrates a failure occurs and affects the switch, step 328, and implements recovery mappings for failure condition, step 330).

With respect to claims 2, 20, and 25, Jardetzky discloses adding the second communication interface as an outgoing interface to a routing entry having the first communication interface as an outgoing interface (the output port of the first entry of the recovery mappings, Fig. 5B, indicates 200-4:a).

With respect to claims 3, 21, and 26, Jardetzky discloses creating a bridged routing vector for bridging the first communication interface and the second communication interface (each switches uses the mapping table to initiate a recovery action when a failure occurs, as disclosed in col. 7, lines 18-19. This implies that a vector is automatically generated for indicating which ports in forwarding descriptor to direct the network traffic).

With respect to claims 4, 11, 22, 27, 35, and 42, Jardetzky discloses detecting a failure affecting communication over the first communication interface (Fig. 5B illustrates that a failure occurs at switch 100-2).

With respect to claims 5, 12, 18, 23, 36, and 50, Jardetzky discloses wherein the plurality of communication interfaces comprises a plurality of line cards (Fig. 1B illustrates each switch comprising a plurality of ports, herein, each port and/or multiple ports can be associated with a line card).

With respect to claims 13, 45, and 51, Jardetzky discloses a method for protection switching in a networking device having a plurality of communication interfaces (Fig. 1B). Jardetzky discloses pre-establishing a bridged routing table separate from a main routing table (Fig. 5B) and wherein, the main routing table for routing network traffic (Fig. 5A). Jardetzky discloses the bridged routing table for bridging network traffic between each communication interface in each of a number of communication interface pairs, where each communication interface pair represents a working communication interface and a corresponding protection communication interface from among the plurality of communication interfaces (when failure occurs in the switch 100-2, the entry of the recovery mappings points to the output port 4:a of link 200 (protection communication interface) instead of 1:a of link 200 (working communication interface), as disclosed in Fig. 5B). Jardetzky discloses detecting a failure affecting communication over the working communication interface (Fig. 5B illustrates that a failure occurs at switch 100-2). Jardetzky discloses determining a protection communication interface to protect the working communication interface (Fig. 5B illustrates port 200-4:a has been used to protect working communication interface). Jardetzky discloses obtaining the pre-established bridged routing table for the communication interface pair associated with the working communication interface and the protection communication interface (Fig. 5B) and

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bridging the protection communication interface to the working communication interface using the pre-established bridged routing table for the communication interface pair associated with the working communication interface and the protection communication interface (Figure 4 illustrates a failure occurs and affects the switch, step 328, and implements recovery mappings for failure condition, step 330).

With respect to claims 28-29, 43-44, and 56-57, Jardetzky discloses that the computer program is embodied in a computer readable medium and/or a data signal (Figs. 3A-B and 4 illustrate a flow chart for a process for protecting a connection from a given number of failure conditions. The program used to implement the stated flow chart must be stored in a memory to be executed by the CPU and the instructions are electrical signals).

#### ***Allowable Subject Matter***

3. Claims 7-10, 14-17, 31-34, 38-41, 46-49, and 52-55 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

4. Applicant's arguments filed October 11, 2005 have been fully considered but they are not persuasive.

Applicant argues in page 16 that according to applicant's specification, Fig. 5, when two interfaces are bridged, network traffic is forwarded over both interfaces. Examiner respectfully

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disagrees. First of all, applicant's argument is not directed to the claimed invention. Examiner has carefully reviewed the claims and found no such claimed limitation, e.g., network traffic is forwarded over both interfaces. Secondly, if a failure occurs in one interface, then why the network traffic still forwarding to that failed interface, when that failed interface does not function.

Applicant further argues in page 16 that according to Jardetzky, network traffic is re-routed from one interface to another and is not bridged between two interfaces. Examiner respectfully disagrees. Bridging, herein, as considered by the examiner, is mapping or re-routing data traffic; whereby network traffic is mapped from a failed interface to another interface. Therefore, Jardetzky discloses all the claimed limitations as recited in the independent claims.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

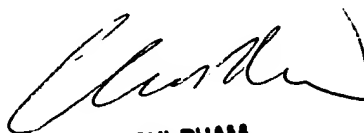
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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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12/12/05